

Abstract

Screening method for detecting amidase or nitrohydratase activity, which comprises

- a) preparing a replica of amidases- or nitrile hydratase-expressing cell colonies by means of a support, followed by,
- b₁) in the case of colonies having nitrile hydratase genes to be assayed, firstly incubating the colonies adhering to the support with a substrate solution composed of a nitrile of the formula (I) R-CN and of a buffer, and subsequently
- b₂) carrying out an incubation with a buffered hydroxylammonium salt solution, or,
- c) in the case of cell colonies having amidase genes to be assayed, incubating the colonies adhering to said support with a substrate solution composed of an amide of the formula (II) R-CONH₂, a hydroxylammonium salt and a buffer, and then,
- d) following b₂) or c), staining the active colonies by transferring the support to an iron (III) salt solution, and
- e) where appropriate, isolating the active colonies,
and use thereof.